(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 14 October 2004 (14.10.2004)

PCT

(10) International Publication Number WO 2004/087142 A1

- (51) International Patent Classification⁷: A61K 31/435, C07D 215/22, 405/12, 409/12, 417/12, 401/12, 417/14, A61P 11/00, 29/00
- (21) International Application Number:

PCT/EP2004/003516

- (22) International Filing Date: 2 April 2004 (02.04.2004)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

Priority Data:		
0307856.5	4 April 2003 (04.04.2003)	GB
0311462.6	19 May 2003 (19.05.2003)	GB
0313489.7	11 June 2003 (11.06.2003)	GB
0316656.8	16 July 2003 (16.07.2003)	GB
0316657.6	16 July 2003 (16.07.2003)	GB
0510057.0	20002) ==== (== ,	

- (71) Applicant (for all designated States except AT, US): NO-VARTIS AG [CH/CH]; Lichtstrasse 35, CH-4056 Basel (CH).
- (71) Applicant (for AT only): NOVARTIS PHARMA GMBH [AT/AT]; Brunner Strasse 59, A-1230 Vienna (AT).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): FAIRHURST, Robin, Alec [GB/GB]; Novartis Horsham Research Centre, Wimblehurst Road, Horsham, West Sussex RH12 5AB (GB). SANDHAM, David, Andrew; Novartis Horsham Research Centre, Wimblehurst Road, Horsham, West Sussex RH12 5AB (GB). BEATTIE, David; Novartis Horsham Research Centre, Wimblehurst Road, Horsham, West Sussex RH12 5AB (GB). BRUCE, Ian; Novartis Horsham Research Centre, Wimblehurst Road, Horsham, West Sussex RH12 5AB (GB). CUENOUD, Bernard [CH/CH]; 7, rue Voltaire, CH-1006 Lausanne (CH). MADDEN, Reamonn [GB/GB]; 88 North End Avenue, North End, Portsmouth, Hampshire P02 9EB (GB). PRESS, Neil, John [GB/GB]; Novartis Horsham Research Centre,

Wimblehurst Road, Horsham, West Sussex RH12 5AB (GB). TAYLOR, Roger, John [GB/GB]; Novartis Horsham Research Centre, Wimblehurst Road, Horsham, West Sussex RH12 5AB (GB). TURNER, Katharine, Louise; Novartis Horsham Research Centre, Wimblehurst Road, Horsham, West Sussex RH12 5AB (GB). WATSON, Simon, James [GB/GB]; Novartis Horsham Research Centre, Wimblehurst Road, Horsham, West Sussex RH12 5AB (GB).

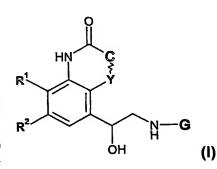
- (74) Agent: GRUBB, Philip; Novartis AG, Corporate Intellectual Property, CH-4002 Basel (CH).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: QUINOLINE-2-ONE-DERIVATIVES FOR THE TREATMENT OF AIRWAYS DISEASES



(57) Abstract: Compounds of formula (I) in free or salt form, wherein -C-Y-, R^1 and R^2 are G have the meanings as indicated in the specification, are useful for treating conditions that are prevented or alleviated by activation of the (β_2 -adrenore-ceptor. Pharmaceutical compositions that contain the compounds and a process for preparing the compounds are also described.